

CLAIMS:

1. A catalyst composition for the polymerization of propylene or mixtures of propylene and one or more copolymerizable comonomers, said catalyst composition comprising one or more Ziegler-Natta procatalyst compositions comprising one or more transition metal compounds
5 and one or more monoesters of aromatic carboxylic acid internal electron donors; one or more aluminum containing cocatalysts; and a mixture of two or more different selectivity control agents, said SCA mixture comprising from 70 to 98 mol percent of one or more esters of one or more aromatic monocarboxylic acids or substituted derivatives thereof, and from 30 to 2 mol percent of one or more alkoxysilane compounds containing one or more 5- or 6-membered cyclic groups
10 optionally containing one or more Group 14, 15 or 16 heteroatoms.
2. The catalyst composition of claim 1 wherein the internal electron donor is ethyl benzoate.
3. The catalyst composition of claims 1 or 2 wherein the SCA mixture comprises ethyl p-ethoxybenzoate and an alkoxysilane selected from the group consisting of dicyclopentyl-di-
15 methoxysilane, methylcyclohexyldimethoxysilane, ethylcyclohexyldimethoxysilane, dicyclohexyldimethoxysilane, methylcyclopentyl dimethoxysilane, cyclopentyltrimethoxysilane, isopropylcyclohexyldi-methoxysilane, ethylcyclopentyl dimethoxysilane, cyclopentylpyrrolidinodimethoxysilane, bis(pyrrolidino)dimethoxysilane, bis(perhydroisoquinolino)dimethoxysilane, bis(perhydroquinolino)dimethoxysilane,
20 bis(perhydroisoindolino)dimethoxysilane, bis(perhydroindolino)dimethoxysilane, and (perhydroquinolino)(perhydroisoquinolino)dimethoxysilane.
4. The catalyst composition of claim 3 wherein the alkoxysilane is dicyclopentyl dimethoxysilane or methylcyclohexyldimethoxysilane.
5. A catalyst composition according to claim 1 wherein the total quantity of selectivity
25 control agent employed is limited to provide a molar ratio, based on transition metal, from 1 to 100.
6. A method of polymerizing propylene or mixtures of propylene and one or more copolymerizable comonomers comprising contacting said monomer or monomer mixture at a temperature from 45 to 90 °C with a catalyst composition comprising one or more Ziegler-Natta procatalyst compositions comprising one or more transition metal compounds and one or more
30 internal electron donors selected from the group consisting of esters of aromatic monocarboxylic acids; one or more aluminum containing cocatalysts; and a mixture of two or more different selectivity control agents, said SCA mixture comprising from 70 to 98 mol percent of one or more esters of one or more aromatic monocarboxylic acids or substituted derivatives thereof, and from 30

to 2 mol percent of one or more alkoxysilane compounds containing one or more 5- or 6-membered cyclic groups optionally containing one or more Group 14, 15 or 16 heteroatoms.

7. The method of claim 6 conducted at a temperature from 67 to 90 °C.
8. The method of claim 6 wherein the internal electron donor is ethyl benzoate.
- 5 9. The method of claim 6 wherein the SCA mixture comprises ethyl p-ethoxybenzoate and an alkoxysilane selected from the group consisting of dicyclopentyl-di-methoxysilane, methylcyclohexyldimethoxysilane, ethylcyclohexyldimethoxysilane, dicyclohexyldimethoxysilane, methylcyclopentyl-dimethoxysilane, cyclopentyltrimethoxysilane, isopropylcyclohexyldi-methoxysilane, ethylcyclopentyl-dimethoxysilane, cyclopentylpyrrolidinodimethoxysilane,
10 bis(pyrrolidino)dimethoxysilane, bis(perhydroisoquinolino)dimethoxysilane, bis(perhydroquinolino)dimethoxysilane, bis(perhydroisoindolino)dimethoxysilane, bis(perhydroindolino)dimethoxysilane, and (perhydroquinolino)(perhydroisoquinolino)dimethoxysilane.
- 10 10. The method of claim 6 wherein the alkoxysilane is dicyclopentyl-dimethoxysilane or
15 methylcyclohexyldimethoxysilane.
11. The method according to any one of claims 6-10 conducted under gas phase polymerization conditions.
12. The method according to any one of claims 6-10 which is conducted in more than one reactor operating in series.